

### **Section 3. REGION-WIDE ACTIVITIES**

Region-wide activities encompass five categories: (1) policy planning and development; (2) core regulatory (programs that are not an integral part of the watershed management activities); (3) nonpoint source pollution control; (4) ground water, and (5) monitoring, assessment, and reporting.

#### **3.1 Planning and Policy Development**

##### *A. Triennial Review Issues*

Section 303(d) of the CWA requires that the State hold public hearings to review applicable water quality standards (WQS), and as appropriate, modify and adopt standards. WQS are beneficial uses and water quality objectives (WQOs) for waters of the State. Section 130 of 40 CFR also prescribes this requirement. Further, CWC Section 13240 requires that the State formulate and periodically update regional Basin Plan's. The Basin Plan is a master planning document comprised of five components: (1) identifies the waters of the Basin; (2) designates the beneficial uses of those waters; (3) establishes WQOs for the protecting uses; (4) prescribes an implementation plan (actions taken to enforce WQSs), and (5) establishes a monitoring and surveillance program to assess implementation efforts. Triennial Review of the Basin Plan was completed in June 2002. The following issues were identified for review/update:

- *Beneficial Use Designation for Surface Waters* – Staff proposes to incorporate results from “1999 Surface Water Survey: Salton Sea Watershed, Imperial Valley Waterbodies” into the Basin Plan. This document is part of the reaffirmation requirements for current water quality standards.
- *Water Recycling Policy* – Staff proposes to: (a) develop policy to encourage wastewater recycling, and (b) require permits for wastewater discharges to surface waters or evaporation/percolation ponds, to evaluate and propose reclamation alternatives.
- *Beneficial Use Designation of Aquifers* – Staff proposes to review available ground water data to identify beneficial uses of individual aquifers within hydrologic units. (Beneficial uses of ground water in the Colorado River Basin Region are based on hydrologic units.)
- *Guidelines for Sewage Disposal and Land Developments* – Staff proposes to revise the guidelines and Basin Plan to account for population density, distance to underground utilities, and potential receptors. The current 1979 guidelines for sewage disposal do not consider these factors.
- *Water Quality Objectives for Nitrates and Total Dissolved Solids (TDS)* – Staff proposes to review water quality objectives for nitrates and TDS in ground water to determine their adequacy for protecting water quality and beneficial uses, particularly in areas with significant increases in these parameters (Pinyon Pines, Cathedral City, Desert Hot Springs, and others).
- *Correction of Errors, Outdated Information, and Inclusion of Referenced Policies* - Staff proposes to correct errors and outdated information in the current Basin Plan (1994 edition), and include copies of the policies referenced in Section 5.
- *Removal of Fecal Coliform* – Staff proposes to remove fecal coliform monitoring from the Basin Plan. Studies show that indicator organisms that correlate best with illness and disease are enterococci and *E. coli* for fresh waters, and enterococci for marine waters.

### *B. Geographic Information Systems*

A Geographic Information System (GIS) is an organized collection of computer hardware, software, geographic data, and personnel designed to efficiently capture, store, update, manipulate, analyze, and display all forms of geographically referenced information. Regional Board staff has acquired hardware and software to establish a regional GIS to support basin planning activities, watershed management, development and implementation of TMDLs, and underground storage tanks. To employ this technology to its full potential, staff resources will be directed toward locating, acquiring, integrating, and managing geographic and geographically referenced data from multiple sources.

#### Ground Water Mapping

Identifying and mapping ground water resources and water quality impacts is needed for developing and implementing aquifer protection strategies. The following are recommended for mapping:

- *Coachella Valley Groundwater Quality and Valley Wellhead Protection*
- *Mission Springs Water District Onsite Disposal System*
- *Yucca Valley Ground Water Mapping*
- *Imperial Valley*
- *Bard Valley*
- *Palo Verde*
- *Morongo Valley*

### *C. TMDL Amendments*

The TMDL Development Unit is responsible for coordinating Basin Plan Amendments for each TMDL, and requires an estimated 0.8 PY per TMDL.

#### **SB390 – Review of Waivers**

Senate Bill 390 was signed into law on October 9, 1999, and requires that waivers for waste discharge requirements (WDRs) not exceed five years. It further requires that the terms of waivers be reviewed at a public hearing prior to renewal, and that the Regional Board and the State Board enforce the conditions of the waiver. Region 7 has thirteen categories of discharges that permit WDR waivers (Regional Board Resolution 93-004) that historically have not been reviewed. Two significant discharges covered by the Board's resolution are septic tank and leach field systems, and irrigation return waters. The Regional Board regulates septic tank discharges when the discharge flow is 5,000 gallons per day or greater. Local health departments regulate smaller flows. SB 390 is unfunded and estimated to require five to fifty PY's to implement.

## **3.2 Core Regulatory**

### *A. NPDES*

Section 402 of the Clean Water Act (CWA) requires NPDES permits for all point source discharges of pollutants to waters of the U.S. (lakes, rivers, wetlands, etc.). Exceptions include: return flows from irrigated agriculture, runoff from agricultural croplands and forestlands, and certain point source storm

water discharges. The discharge of dredge and fill materials to waters of the United States are subject to permits pursuant to Section 401 (issued by the Regional Board) and 404 of the CWA (issued by the U.S. Army Corp of Engineers), and not the NPDES program. USEPA has approved the State's program to issue NPDES permits pursuant to CWA Section 402 and CWC Section 13370.

NPDES permits issued for point sources require that discharges not contain pollutants in levels that cause receiving waters to fail to meet water quality standards (CWA Section 301). The discharge must also satisfy technology-based requirements by meeting an acceptable level of pollution control for that type of discharge, even if that level of control is more than needed to protect the receiving water. In essence, water quality-based standards are designed to protect specific water bodies, while technology-based standards assure a minimum level of control for a particular type of discharge, regardless of where the discharge occurs.

Similar to direct discharges to waters of the U.S., industrial discharges to sanitary sewer systems must meet performance standards including industry-specific technology-based standards, and local specifications that protect the wastewater treatment plant receiving the discharge as well as the receiving waters. These "indirect" discharges do not require NPDES permits. Pollution control standards are implemented through locally issued permits under the Industrial Pretreatment Program.

Discharges authorized by NPDES and Industrial Pretreatment Programs, must comply with stringent control requirements. Dischargers are required to regularly monitor and report compliance with the conditions of their permits. Violations are subject to enforcement actions by the State and USEPA, and private citizens pursuant to CWA Section 505.

The USEPA NPDES classification system defines a "major discharger" as: municipal Waster Water Treatment Plant (WWTP) with design flows equal to or greater than one million gallons-per-day (MGD), or WWTPs with design flows less than one MGD with actual or potential adverse environmental impacts. There are 9 major NPDES facilities and 23 minor NPDES facilities in Region 7. The schedule for major and minor NPDES permit renewals is located in Appendix A.

Compliance activities include:

- Preparing for compliance inspections.
- Conducting compliance inspections, including travel.
- Completing inspection documents (inspection forms, photographs, correspondence to the discharger, etc.).
- Reviewing Discharge Monitoring Reports (DMRs) and Self Monitoring Reports (SMRs).

Compliance inspections for NPDES facilities are classified as Level A or Level B. Level A inspections provide a comprehensive assessment of facility compliance with its NPDES Permit or Waste Discharge Requirements (WDRs). The Level B inspection provides an expeditious, condensed assessment of facility compliance with effluent and receiving water limitations, self-monitoring and reporting program requirements, and other specifications in the NPDES Permit or WDRs. This level of inspection is useful for assessing potential problems and trends in facility performance, and for maintaining interaction between the Regional Board and discharger.

Annual compliance inspections (Level A or B) are conducted for all NPDES dischargers. The table below is from the NPDES Program Work Plan and shows the average annual frequency for level-A and B inspections:

Majors			Minors			Total
<u>A-level</u>	<u>B-level</u>	<u>Total</u>	<u>A-Level</u>	<u>B-level</u>	<u>Total</u>	<u>Wastewater</u>
12	12	24	0	62	62	86

The NPDES Compliance Inspection Schedule for the next five fiscal years is in Appendix D.

### *B. Chapter 15*

The Chapter 15 Program is part of the Core Regulatory Program for waste treatment, storage, or disposal sites. The statute specifically requires SWRCB to develop regulations to "ensure adequate protection of water quality and statewide uniformity in the siting, operation, and closure of waste discharge sites." These regulations are found in California Code of Regulations [CCR] Title 27 (solid waste, including mining waste) and CCR Title 23, Division 3 (hazardous waste). The regulations establish a classification system for waste disposal sites and include requirements for siting, construction, operation, monitoring, cleanup, and closure/post-closure. Program functions include issuance and amendment of waste discharge requirements, compliance inspections, informal and formal enforcement actions, and reviewing self-monitoring reports, technical reports, and closure/post-closure plans. The program includes over 1100 waste treatment, storage, or disposal sites statewide (landfills, surface impoundments, waste piles, and land treatment units). The Chapter 15 Waste Discharge Requirement update and rescission schedule is in Appendix F.

## **3.3 Nonpoint Source Pollution Control**

Effective NPS pollution control must utilize a consistent approach statewide.

### Regional NPS Control Program

The Regional NPS Management Plan for Region 7 includes:

- Implementation of the "Plan for California's Nonpoint Source Pollution Control Program"
- Implementation of the Basin Plan
- Implementation of applicable statewide plans and policies
- Development and implementation of TMDLs for impaired and threatened surface waters (as funded)
- Implementation of regional planning and prioritization through the WMI
- Completion of annual work plans
- Coordination with local governments in the development of general plans
- Implementation of the three-tiered approach to NPS Regulation
- Financial and technical assistance
- Formal agreements (Memoranda of Understanding and Management Agency Agreements)
- Public participation and coordination with stakeholders and cooperating agencies (as funded)
- Water Quality Monitoring and Assessment, and regular reporting (as funded)
- Assessment of Management Measure Effectiveness (as funded)

The above elements are critical to the success of an NPS program. Some elements are not fully implemented (e.g. formal agreements, implementation of the Three-Tiered approach). Efforts are underway to address these deficiencies, and strengthen the NPS program. Water quality monitoring critical to the success of Region 7's water quality control efforts is significantly under funded.

Regional Board staff will utilize tools from the NPS program to address NPS inputs, including the three-tiered approach and NPS Management Measures. Tools from Core Regulatory Program, TMDL Program, and watershed planning will also be used to address NPS pollution.

One obstacle to NPS control is the lack of guidance regarding activities under the “tiers” and the mechanisms or triggers to guide movement from one tier to another. Sequential advancement through the tiers is not required. The Regional Board may progress directly to Tier 3 enforcement if water quality impacts are severe. Triggers to advance from Tier 1 include:

- a Regional Board decision at any time;
- an emergency or environmental issue critical to water quality
- lack of cooperation by a nonpoint source discharger;
- failure to implement Tier 1 agreements (staff-level or Board approved agreements);
- legislative mandates, and
- listing a waterbody as impaired.

The State Board is finalizing guidance for movement in the “three-tiered” approach for State and Regional Boards pursuant to section 13369(a)(2)(B) of the California Water Code.

### **3.4 Funding**

The Regional Board facilitates funding for water quality improvement projects from various state and federal sources. Table I-9 in Appendix I provides the Region’s funding priorities and potential funding sources. This information is also available on the Region’s website.

### **3.5 Ground Water**

#### *A. Leaking Underground Storage Tanks (USTs) Region-wide*

Leaking USTs used for storing petroleum fuel cause significant pollution to ground water in Region 7, particularly in Coachella Valley (located within the priority watershed), and the City of Blythe. Soils in these areas are porous and permeable, and easily allow migration of pollutants to ground water. The gasoline oxygenate MTBE (methyl tertiary-butyl ether) is a major concern given its wide spread use, mobility, and persistence in the aqueous phase. Water districts in Coachella Valley have abandoned several drinking water wells due to MTBE impacts. This is a serious problem considering the Coachella Valley aquifer is the primary drinking water source for this densely populated area.

#### *B. Ground Water Ambient Monitoring and Assessment (GAMA)*

The California Legislature, Governor, and private citizens are very concerned with public supply well closures due to the occurrence contaminants like MTBE and industrial solvents. The Supplemental Report of the 1999 Budget Act requires the SWRCB to develop a comprehensive ambient ground water monitoring plan to address the increased awareness of potential contaminants and ground water quality concerns. To meet this mandate, SWRCB created the Ground Water Ambient Monitoring and Assessment Program (GAMA). The objective of GAMA is to assess water quality and susceptibility of ground water resources. The GAMA Program has two components: the California Aquifer Susceptibility (CAS) Assessment, and the Voluntary Domestic Well Assessment Project. The former address public water supply wells, and the latter address private water supply wells. The SWRCB Division of Clean

Water Programs, Land Disposal Section, Ground Water Special Studies Unit, manages the GAMA Program. Initial implementation is estimated to require two PYs.

### **3.6 Monitoring Assessment and Reporting**

Staff developed a comprehensive ambient monitoring program to assess the effectiveness of water quality control programs. The Surface Water Ambient Monitoring Program (SWAMP) was a statewide multi-year program designed to evaluate the status of California's water resources, and the effectiveness of water quality improvement and protection programs. SWAMP applied sound scientific methods, to:

- characterize water body resources and their biological communities;
- specify water-related environmental objectives given resource availability and economic impact, and
- identify and prioritize issues preventing the State and Regional Boards from accomplishing those objectives.

SWAMP collected information at sites with known or suspected water quality problems, and provided scientific support for regional studies, and TMDL development/implementation. SWAMP links water quality to the health of aquatic systems, and collected baseline measurements for specific pollutants or stressors before and after implementation of TMDL best management practices.

Staff activities for the ambient monitoring program included: identifying monitoring gaps; identifying reference water bodies; developing staff resources; reviewing historical monitoring by this and other agencies; developing multi-agency contracts; participating in statewide work groups to standardize methods for experimental design, and developing standardized information collection and reporting procedures. These activities minimize duplication of efforts, encourage data sharing, ensure data integrity and accuracy (quality assurance/quality control), and identify areas requiring intensive monitoring.

Regional Board staff prepared a SWAMP work plan for SFY 02/03 with SWRCB under a master contract with the Department of Fish and Game (DFG). The work plan identified sites and monitoring efforts scheduled for the next five years. Unfortunately, funding is not available for SFY 03/04. Region 7 is divided into five hydrologic areas: Lucerne; Hayfield; Coachella; Anza Borrego/Imperial, and East Colorado River. SWAMP will be implemented in each of these units at least one year out of five. Information collected will include: field measurements; general chemistry; physical site data; site-specific chemical analyses, and biological/toxicological data.